

REMARKS

Claims 1-27 are pending in the Application. Claims 1-5, 7, 10, 12, 13 and 17-26 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 6,029,992 (Vendely et al.). Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vendely et al. in view of United States Publication No. 2005/0179236A1 (Nash et al.). Claims 14 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vendely et al. in view of United States Publication No. 2001/0048216A1 (Varcus et al.). Claims 8, 9, 11, 15 and 16 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The drawings are objected to.

Objections to the Drawings

The drawings are objected to under 37 C.F.R. 1.83(a) as failing to show the feature of claim 16: "wherein said airbag module is characterized by the absence of additional attachment mechanisms". Claim 16 depends from claim 2, which recites "a fastener element adapted to extend through said inner plate, said cushion and said base plate, thereby attaching said inner plate and said base plate." Accordingly, claim 16 as originally filed reads as though a single fastener element (that recited in claim 2) attaches the inner plate and the base plate without any additional fastener elements being used. The air bag module embodiment of Figures 1A-2A correctly shows that multiple fastener elements (i.e., threaded studs 68) are used to attach the cushion, inner plate and base plate to one another. Accordingly, claim 16 is amended to specify that the fastener element of claim 2 is a "first fastener element" and to further recite "a plurality of additional fastener elements; wherein said first fastener element and said additional fastener elements are sufficient to attach said cushion, said inner plate and said base plate to one another". Accordingly, the limitation of claim 16, "wherein said airbag module is characterized by the absence of additional attachment mechanisms" now accurately describes the air bag module of Figures 1A-2B, and the objection to the drawings is overcome.

Applicants have amended Figure 4D, as shown on the Replacement Sheet included with this Amendment, to refer to the thickened area of the base plate 56' with the reference numeral 169'. This change does not present new matter. Original paragraph [0046] states:

The base plate 56' is formed with a thickened area 169 to help accomplish the twisting and wedging action.

Original Figure 4D failed to include the reference number 169 recited in paragraph [0046]. Furthermore, the reference number 169 is used Figure 4A to refer to a different element, an opening in a protrusion 158', as described in paragraph [0043]. Thus, paragraph [0046] is amended to refer to the thickened area with reference number 169', rather than 169.

Rejections of Claims 1-5, 7, 10, 12, 13 and 17-26 under 35 U.S.C. §102(b)

The Examiner rejects claims 1-5, 7, 10, 12, 13 and 17-26 under 35 U.S.C. §102(b) as being anticipated by Vendely et al. For a claim to be properly rejected as anticipated under 35 U.S.C. § 102, every element and limitation found in the rejected claim must be found in the Section 102 reference cited by the Examiner. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See MPEP §2131.

Independent claims 1, 22 and 23 are amended to clearly recite a preassembled air bag module having certain elements. Specifically, claim 1 is amended to require that the claimed air bag module having the recited inner plate, base plate, cover and inflatable cushion is:

a preassembled unit configured such that said cushion, cover, and attached inner plate and base plate are retained to one another when said cushion is inflated.

(emphasis added)

Similarly, the air bag module of claim 22 having the recited cushion, inner plate, cover, base plate, fastener elements, and inflator is now recited as “a preassembled unit”.

Finally, the method of assembling an air bag module in claim 23 now recites the step of:

Securing said fastener elements to attach said inner plate, said cushion, said cover and said base plate together *as a preassembled air bag module* sufficiently to prevent separation of said cover from said base plate and said inner plate due to inflation of said cushion.

(emphasis added)

A missing period is also added to the end of claim 23. None of these amendments involve new matter. The specification indicates that “[t]he air bag module is typically assembled as a module prior to connection to the steering wheel assembly.” See paragraph [0002], page 1. With respect to the air bag module 10 of Figure 1, the specification states:

Accordingly, the air bag module 10 is held together and the cover 32 is retained at the base plate 56 even during inflation of the cushion 12 sufficiently to prevent separation of the cover 32 from the base plate 56. Additional attachment mechanisms [in addition to threaded studs 68 with nuts 70] are not necessary to secure the attachment of the cushion 12, the inner plate 24, the inflator 42 and the base plate 56. This sandwiched arrangement, being cupped by the base plate 56, enables reliable retention of the sandwiched parts to one another *before, during and after* inflation of the cushion 12, while requiring only a minimal number of parts.

(paragraph [0038], page 9, emphasis added)

Thus, the Application clearly defines a preassembled air bag module with components sufficiently retained to one another even during inflation of the cushion, without relying on any other structure to accomplish the retention.

In rejecting claims 1-5, 7, 10, 12, 13 and 17-26, the Examiner relies on component 30 of Vendely et al. to satisfy the claimed “base plate attachable to the inner plate” of claims 1 and 23 and the base plate recited in the positioning and securing steps of claim 23. (The Examiner appears to actually rely on the embodiment of Figure 7, in which the mounting portion of the steering wheel is indicated as 30'. The Examiner-named base plate 30 (or 30') of Vendely et al. is described in Vendely et al. as “a mounting portion of a steering wheel”. **A mounting portion of a steering wheel is not part of an air bag module.** In fact, Vendely et al. clearly indicates that the mounting portion 30 (or 30' in the embodiment of Figure 7) of the steering wheel is part of Vendely et al.'s steering wheel 12 (or 12' in the embodiment of Figure 7) and not part of Vendely et al.'s air bag module 50 (or 50' in the embodiment of Figure 7). With respect to its two embodiments, Vendely et al. states that:

The module 50 is assembled separate and independent from the steering wheel 12 [.]

(col. 6, lines 41-42)

and

The module 50' is assembled separate and independent from the steering wheel 12' [.]

(col. 11, lines 19-20)

Thus, Vendely et al.'s mounting portion 30 or 30' of a steering wheel is not a component of an air bag module that is “a preassembled unit” as required by amended independent claims 1, 22 and 23. For at least this reason, the Section 102(b) rejection of independent claims 1, 22 and 23, and of claims 2-5, 7, 10, 12, 13 and 17-21 and 24-26 which depend therefrom, is overcome.

Additionally, Vendely et al. emphasizes that its air bag module 50, 50' does not have a cover secured sufficiently to withstand the forces of inflation prior to fastening the cover 40, 40' to the steering wheel 12, 12'. Vendely et al. states:

Advantageously, the cover 40 is loosely attached to the base plate 70 such that the cover 40 is attached securely enough for transport and storage of the module 50, *but not tightly enough to withstand the forces of inflation.* (col. 5, lines 56-60)

Advantageously, the cover 40' is loosely attached to the base plate 70' such that the cover 40' is attached securely enough for transport and storage of the module 50', *but not tightly enough to withstand the forces of inflation.* (col. 10, lines 23-26)

Thus, Vendely et al.'s air bag module 50, 50' is not "a preassembled unit configured such that said cushion, cover, and attached inner plate and base plate are retained to one another when said cushion is inflated" as required by amended claim 1. Nor is Vendely et al.'s air bag module 50, 50' a "preassembled unit" that has an inflator attached "with [a] cushion, [an] inner plate, [a] base plate and [a] cover sufficient to prevent separation from one another due to inflation of said cushion" as required by amended claim 22. Finally, assembling Vendely et al.'s air bag module 50, 50' cannot include a step of "securing . . . fastener elements to attach [an] inner plate, [a] cushion, [a] cover and [a] base plate together as an air bag module that is a preassembled unit; wherein [the] securing is sufficient to prevent separation of [the] cover from [the] base plate and [the] inner plate due to inflation of the cushion" as required by amended independent claim 23. Vendely et al.'s explicit emphasis on the fact that the cover 40 (or 40') is only loosely attached to the base plate, not attached securely enough to withstand inflation forces, prior to attachment to the mounting portion 30 or 30' of the steering wheel, teaches away from an air bag module as claimed. For at least these reasons the Section 102(b) rejection of claims 1, 22 and 23 and claims 2-5, 7, 10, 12, 13 and 17-22 and 24-26 which depend therefrom is overcome.

Rejections of Claim 6 under 35 U.S.C. §103(a)

Claim 6 is rejected under Section 103(a) as being unpatentable over Vendely et al. in view of Nash et al. The Examiner relies on Nash et al.'s inflator mounting flange 50 abutting an outer surface of a base plate 66 in Figure 2 to meet the requirement of claim 6 that the "mounting flange of [the] inflator abuts an outer surface of [the] base plate". The Examiner states that:

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the mounting flange of Vendely et al. in view of the mounting flange of Nash et al. to include abutting the base plate so as to provide a secure connection between the mounting flange and the base plate.

(Office Action, page 5)

A *prima facie* case of obviousness requires that the prior art references teach or suggest all claim limitations of the examined claim. (MPEP 2143.03) As discussed above, Vendely et al. does not teach or suggest all of the limitations of claim 1, from which claim 6 depends. Neither does Nash et al. teach or suggest these limitations missing from Vendely et al. (i.e., the requirement of claim 1 that the "air bag module is a preassembled unit configured such that [the] cushion, cover, and attached inner plate and base plate are retained to one another when [the] cushion is inflated"). For at least this reason, the rejection of claim 6 under Section 103(a) is overcome.

Additionally, if the proposed modifications or combinations of the prior art would change the principle of operation of the prior art invention being modified, then the teachings are not sufficient to render the claims *prima facie* obvious. MPEP 2143-01; discussing *in re Ratti*, 270 F.2d 810, 813; 123 USPQ 349, 352 (CCPA 1959) where an obviousness rejection was reversed because the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate."

If Vendely et al.'s inflator mounting flange 96 or 96' were modified in light of Nash et al. to abut "*an outer surface* of [the] base plate" as required by claim 6, Vendely et al.'s inflator 90 or 90' would have to be reconfigured so that it would somehow fit under the steering wheel mounting portion 12 or 12' (the Examiner-named base plate) of Vendely et al. so that it could abut an outer surface thereof. There is no apparent way of accomplishing this without completely redesigning the central hub portion 18 or 18' of Vendely et al.'s steering wheel 12 or 12' and, even then, doing so would require that the inflator be part of the steering wheel 12 or 12', rather than a component of the claimed preassembled air bag module unit. For at least these reasons as well, the rejection of claim 6 is overcome.

Rejections of Claims 14 and 27 under 35 U.S.C. §103(a)

Claims 14 and 27 are rejected under Section 103(a) as being unpatentable over Vendely et al. in view of Varcus et al. A *prima facie* case of obviousness requires that the prior art references teach or suggest all claim limitations of the examined claim. (MPEP 2143.03) As discussed above, Vendely et al. does not teach or suggest all of the limitations of claim 1, from which claim 6 depends. Neither does Varcus et al. teach or suggest these limitations missing from Vendely et al. (i.e., the requirement of claim 1 that the "air bag module is a preassembled unit configured such that [the] cushion, cover, and attached inner plate and base plate are retained to one another when [the] cushion is inflated"). For at least this reason, the rejection of claims 14 and 27 under Section 103(a) is overcome.

Conclusion

In light of the amendments to the claims, the specification and the drawings, the Application is in condition for allowance with pending claims 1-27, which action is respectfully requested.

Respectfully submitted,

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Date: November 8, 2006